ACQUISITION OF HIGH-TEMPORAL FREE-BREATHING MR IMAGES

Abstract of Disclosure

A system and method are disclosed to acquire high temporal resolution free-breathing cardiac MR images. The technique includes monitoring heart rate of a patient just prior to image acquisition to acquire a time period of an R–R interval, and using this time period from the heart rate monitoring to prospectively estimate future R–R intervals. The acquisition of MR data can then commence at any point in an R–R interval and extend for the time period recorded. The data acquisition can be segmented and acquired in successive R–R intervals, then combined to create high temporal resolution images.

Figures